

REMARKS

Claims 1-11 are pending in the application. By this amendment, new claims 10-11 are added. Claims 1-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,337,682 B1 (hereinafter “Hwang”). Applicant adds the new claims listed in the Appendix below and respectfully submits the arguments below in traversal of the claim rejections.

Applicant submits that claim 1 is believed to be patentable because each and every element of the claim is not disclosed or suggested by Hwang. Claim 1 recites:

An apparatus for adjusting a sampling phase of a digital display,
comprising:

a phase locked loop (PLL) circuit unit for converting a frequency of a sampling clock signal and outputting a converted frequency, the sampling clock signal for converting an analog video signal into digital format;

an analog to digital converter (ADC) for converting an incoming analog video signal into digital format using the sampling clock signal input from the PLL circuit unit to output a converted video signal;

a detection unit for detecting in a predetermined region a maximum phase shift of the converted video signal; and

a control unit for controlling the PLL circuit unit so that the sampling phase can be adjusted in accordance with the maximum phase shift detected by the detection unit.

(Emphasis added).

For example, Hwang fails to disclose or suggest a detection unit for detecting in a predetermined region a maximum phase shift of the converted video signal. In the Office Action, the Examiner points out the phase detector 70 as allegedly corresponding to the claimed detection unit and the A/D converter 20 as allegedly corresponding to the claimed analog to digital converter (ADC). The phase detector 70, however, compares the horizontal synchronous signal Hsync' and the sampling clock signal CLK1. See col. 5, lines 65-67. Nowhere in Hwang is there any mention or suggestion of the phase detector 70 receiving any sort of a converted video signal from the A/D converter 20. Therefore, the phase detector 70 cannot possibly detect in a predetermined region a maximum phase shift of the converted video signal outputted from the A/D converter 20.

Further, Hwang fails to disclose or suggest for detecting in a predetermined region a maximum phase shift of the converted video signal. The fact that the phase detector 70 does not receive a converted video signal is clear evidence that the phase detector 70 does not detect in a predetermined region a maximum phase shift, as recited in the claim.

Claims 2-5, which depend from claim 1, are believed to be patentable for at least the reasons submitted for claim 1.

In addition, claim 2, is believed to be patentable because Hwang fails to disclose or suggest an apparatus wherein the detection unit detects a number of phase shifts exceeding a predetermined reference level within the predetermined region. Rather, Hwang merely measures one phase difference, i.e., between the Hsync' and the sampling clock signal CLK1, and does not detect a number of phase shifts, as recited in the claim.

For reasons similar to those submitted for claim 1, claim 6 is believed to be patentable.

For example, Hwang fails to disclose or suggest:

a) converting an incoming video signal in a predetermined region into a digital format to output a converted video signal, and analyzing the converted signal;

in combination with other elements of claim 6.

Claims 7-9, which depend from claim 6, are believed to be patentable for at least the reasons submitted for claim 6.

To further define the invention, Applicant adds new dependent claims 10-11. New claims 10-11, which depend from claim 1, are believed to be patentable for at least the reasons submitted for claim 1.

Lastly, Applicant amends claim 4 for improved clarity.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Seok-Won Stuart Lee
Limited Recognition No. L0212

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
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CUSTOMER NUMBER

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